

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-22 (canceled)

23. (new) A control system comprising:

a host processor;

a first controller communicatively coupled to the host processor, the first controller being associated with a first network identifier, the first controller including a first module connected to a second module via a first backplane;

a second controller communicatively coupled to the host processor, the second controller being associated with a second network identifier, the second controller including a third module connected to a fourth module via a second backplane; and

a fiber optic cable connecting the first controller and the second controller;

wherein the first controller is programmed to transfer the first network identifier to the second controller via the fiber optic cable and not via either one of the first backplane and the second backplane, the transfer being in response to detecting an error associated with the first controller.

24. (new) A control system as defined in claim 23, wherein the first controller comprises:

a processor;

a co-processor;

an operating system executed by the processor; and,

a co-operating system executed by the co-processor wherein the operating system and the co-operating system cooperate to transfer data between the first controller and the second controller.

25. (new) A control system as defined in claim 23, wherein the first controller comprises a network module and the first network identifier is determined by an operating state of the first controller.

26. (new) A control system as defined in claim 23, wherein the first controller comprises a remote IO head operably connected to a remote IO drop.

27. (new) A control system as defined in claim 23, wherein the first network identifier comprises an Internet Protocol address.

28. (new) A control system comprising:

- a host processor;
- a first controller communicatively coupled to the host processor, the first controller executing an application program, the first controller storing a plurality of state variables;
- a second controller communicatively coupled to the host processor; and
- a fiber optic cable connecting the first controller and the second controller;

wherein the first controller is programmed to transfer the application program and the plurality of state variables to the second controller via the fiber optic cable in response to detecting an error associated with the first controller.

29. (new) A control system as defined in claim 28, wherein the first controller comprises:

- a processor;
- a co-processor;
- an operating system executed by the processor; and
- a co-operating system executed by the co-processor wherein the operating system and the co-operating system cooperate to transfer data between the first controller and the second controller.

30. (new) A control system as defined in claim 28, wherein the first controller comprises a network module and a network identifier associated with the first controller is determined by an operating state of the first controller.

31. (new) A control system as defined in claim 30, wherein the network identifier comprises an Internet Protocol address.

32. (new) A control system as defined in claim 28, wherein the first controller comprises a remote IO head operably connected to a remote IO drop.

33. (new) A control system as defined in claim 28, wherein:

the first controller is associated with a first network identifier, the first controller including a first module connected to a second module via a first backplane;

the second controller is associated with a second network identifier, the second controller including a third module connected to a fourth module via a second backplane; and

the first controller is programmed to transfer the first network identifier to the second controller via the fiber optic cable and not via either one of the first backplane and the second backplane, the transfer being in response to detecting an error associated with the first controller.

34. (new) A control system comprising:

a host processor;

a first controller communicatively coupled to the host processor, the first controller being associated with a first network identifier, the first controller being connected to a first backplane;

a second controller communicatively coupled to the host processor, the second controller being associated with a second network identifier, the second controller being connected a second backplane; and

a fiber optic cable connecting the first controller and the second controller;

wherein the first controller is programmed to transfer the first network identifier to the second controller via the fiber optic cable and not via either one of the first backplane and the second backplane, the transfer being in response to detecting an error associated with the first controller.

35. (new) A control system as defined in claim 34, wherein the first controller comprises:

a processor;

a co-processor;

an operating system executed by the processor; and,

a co-operating system executed by the co-processor wherein the operating system and the co-operating system cooperate to transfer data between the first controller and the second controller.

36. (new) A control system as defined in claim 34, wherein the first controller comprises a network module and the first network identifier is determined by an operating state of the first controller.

37. (new) A control system as defined in claim 34, wherein the first controller comprises a remote IO head operably connected to a remote IO drop.

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38. (new) A control system as defined in claim 34, wherein the first network identifier comprises an Internet Protocol address.